

CLAIMS

1. Motor-vehicle independent suspension for connecting a wheel-carrier (1) of a vehicle wheel (2) to the vehicle structure, comprising a first, a second and a third rod-like connection member (10, 11, 12), wherein each of these rod-like connection members has at the one end a first point of articulation (22, 13, 15) to the wheel-carrier (1) and at the opposite end a second point of articulation (23, 14, 16) to the vehicle structure and is arranged to control one degree of freedom of translation (t, t1, t2) along an axis (y, y1, y2) substantially passing through its own points of articulation; the suspension being also arranged to control the remaining two degrees of freedom of the wheel-carrier (1) by virtue of the torsional stiffness of at least one (10) of the rod-like connection members (10, 11, 12) about its own axis (y) and about a direction (z) substantially perpendicular to its own axis.
2. Suspension according to Claim 1, wherein the first rod-like connection member (10) is arranged to control also a second degree of freedom (r1) of rotation about its own axis (y) and a third degree of freedom (r2) of rotation about a direction (z) substantially perpendicular to its own axis (y).
3. Suspension according to Claim 2, wherein said first rod-like connection member (10) comprises an elongated central body (21) carrying at its ends a first seat (22) for at least one first bush (24) for articulation to the wheel-carrier (1) and a second seat (23) for at least one second bush (25) for articulation to the vehicle structure.

4. Suspension according to Claim 3, wherein each of said first and second seat (22, 23) of the first rod-like connection member (10) carries a pair of bushes (24, 25) defining a respective axis of articulation (x1, x2).
5. Suspension according to Claim 3, wherein each of said first and second seat (22, 23) of the first rod-like connection member (10) carries only one bush (24, 25) defining a respective axis of articulation (x1, x2).
6. Suspension according to Claim 4 or 5, wherein the axes of articulation (x1, x2) of the first rod-like connection member (10) are substantially perpendicular to the axis (y) of that member.
7. Suspension according to any of Claims 4 to 6, wherein the axes of articulation (x1, x2) of the first rod-like connection member (10) are substantially parallel to each other.
8. Suspension according to Claim 3, wherein the central body (21) of the first rod-like connection member (10) has a cylindrical tubular structure.
9. Suspension according to Claim 3, wherein the ratio between the longitudinal size and the transverse size of the first rod-like connection member (10) is at least three.